

RANDOMLY-ORIENTED COMPOSITE CONSTRUCTIONS

ABSTRACT OF THE DISCLOSURE

Composite constructions comprise a plurality of granules that are arranged together in a
5 randomly-oriented manner. The granules each comprise an ordered arrangement of a first
material phase and a second material phase, wherein the first and second material phases are
each continuous, and each occupy different and distinct regions of the granule. At least a
portion of the first and second material phases of each granule are in contact with one another.
The first material phase comprises a material selected from the group consisting of cermet
10 materials, polycrystalline diamond, polycrystalline cubic boron nitride, and mixtures thereof.
The second material phase comprises a material that is relatively softer, e.g., more ductile,
than the first material phase.